Human Resources reports the following personnel changes:

Key Personnel Assignments

Michele Brekke was named manager, Space Shuttle Customer and Flight Integration, Space Shuttle Program. Michael Downey was selected as deputy chief, Energy Systems Test Branch, Energy Systems Division, Engineering Directorate.

Additions to the Workforce

William McArthur joins the Astronaut Office, as a mission specialist astronaut, and director of operations, Russia in Star City.

Lauren Lunde joins the Vehicle Integration Test Office, Flight Crew Operations Directorate, as a flight crew support

Derek Hassmann joins the Flight Director Office, Mission Operations Directorate, as a flight director.

Donald Reed joins the Advanced Development Office, as an aerospace engineer.

Promotions

Matrenia Anumele was selected as a contract specialist in the Projects Procurement Office, Office of Procurement.

Venessa Jankowski was selected as a contract specialist in the Institutional Procurement Office, Office of Procurement.

Sonia Zavala was selected as the division secretary in the GFE Flight Projects Office, International Space Station Program.

Reassignments to Other Centers

Jeane Smith moves to Kennedy Space Center. Rena Perwien moves to Stennis Space Center. David Lengyel moves to Headquarters.

Reassignments to Other Directorates

David Marquette moves from the Mission Operations Directorate to the Information Systems Directorate.

Hector Gongora moves from the Information Systems Directorate to the Center Operations Directorate.

Kenneth Dwyer moves from the Mission Operations Directorate to the Space Shuttle Program. Mike Engle moves from the Mission Operations Directorate

to the International Space Station Program. Mike Jansen moves from the Engineering Directorate to the

International Space Station Program.

Jennifer Jones moves from the Safety, Reliability, and Quality Assurance Office to the International Space Station Program.

Patty Moore moves from the Mission Operations Directorate to the International Space Station Program. Dianne Murphy moves from the Space Shuttle Program to

the International Space Station Program. Jose Limardo-Rodriguez moves from the Engineering Direc-

torate to the Space and Life Sciences Directorate.

Resignations

Troy Estes of the Office of the Chief Information Officer. Christine Mack of the Office of Procurement. Tran Tran of the Mission Operations Directorate. Duane Johnson of the Engineering Directorate. Donald Wiley of the Safety, Reliability, and Quality Assurance Office.

Q DATA

January 12

Astronomers meet: The JSC Astronomical Society meets at 7:30 p.m. at the Center for Advanced Space Studies, 3600 Bay Area Blvd. For more information contact Chuck Shaw at x35416.

Chess Club meets: The Space City Chess Club meets each Friday evening from 5:30 p.m. until 9 p.m. at the Clear Lake United Methodist Church, 16335 El Camino Real, Rm. 423. All skill levels are welcome. For more information, please call James Mulberry at x39287 or James Termini at x32639.

January 17

Astronomy seminar: The JSC Astronomy Seminar Club will meet at noon January 17 and 24 in Bldg. 31, Rm. 248A. For more information contact Al Jackson at x35037.

Scuba club meets: The Lunarfins meets at 7:30 p.m. For more information contact Mike Manering at x32618.

Spaceteam Toastmasters meet: The Spaceteam Toastmasters meet at 11:30 a.m. January 17, 24 and 31 at United Space Alliance, 600 Gemini. For more information contact Patricia Blackwell at (281) 280-6863.

January 18

Communicators meet: The Clear Lake Communicators, a Toastmasters International club, meet January 18 and 25 at 11:30 at Wyle Laboratories, 1100 Hercules, Suite 305. For more information contact Allen Prescott at (281) 282-3281or Richard Lehman at (281) 280-6557.

Directors meet: The Space Family Education board of directors meets at 11:30 a.m. in Bldg. 45, Rm. 712D. For more information contact Lynn Buquo at x34716.

January 25

Radio Club meets: The JSC Amateur Radio Club meets at 6:30 p.m. at Piccadilly, 2465 Bay Area Blvd. For more information contact Larry Dietrich at x39198.

February 1

Warning System Test: The site-wide Employee Warning System performs its monthly audio test at noon. For more information contact Bob Gaffney at x34249.

February 5

NSS meets: The Clear Lake area chapter of the National Space Society meets at 6:30 p.m. at the Parker Williams Branch of the Harris Co. Library at 10851 Scarsdale Blvd. For more information contact Murray Clark at (281) 367-2227.

February 6

Quality Society meets: The Bay Area Section of the American Society for Quality meets at 6 p.m. at the Franco's Restaurant. For details contact Ann Dorris at x38620.

IAAP meets: The Clear Lake/NASA Chapter of the International Association of Administrative Professionals meets at 5:30 p.m. in the Colonial Room at Grace Community Church, 14325 Crescent Landing. Cost is \$12. For more information, contact Elaine Kemp at 281-483-0556.

February 14

MAES meets: The Society of Mexican-American Engineers and Scientists meets at 11:30 a.m. in Bldg. 16, Rm. 111. For more information contact Laurie Carrillo at 281-244-5203.

Tickets on sale for 'Spaceship Rodeo' event at Space Center Houston

If you want to have the time of your life dining and dancing to the best music in town, enjoy the attractions at Space Center Houston, and visit with the Texas Independence Trailriders, then buy your tickets today for the NASA Go Texan "Spaceship Rodeo" TrailRide Dinner Dance. The event will be held from 7 p.m. to 11 p.m. February 6 at Space Center Houston.

Tickets cost \$20 per person. For only \$20 you receive dinner and two drinks, get to dance to Kelly McGuire and Hurricane and see the attractions at Space Center Houston plus clowns, dancers, and ropers from the Houston Livestock Show and Rodeo

Tickets can be purchased at the JSC Exchange Store in Bldg. 11 or at Space Center Houston. Proceeds raised from the event benefit the Houston Livestock Show and Rodeo.

NASA BRIEFS

NASA ROBOTICS MAY HELP SPINAL CORD PATIENTS

NASA engineers and University of California, Los Angeles (UCLA), neurophysiologists are creating a robot-like device that could help rehabilitate thousands of Americans with spinal cord injuries.

"We are developing a prototype robotic stepper device that when complete will be used as part of rehabilitation that can potentially help some people now wheelchair-bound take their first steps," said Jim Weiss, program manager for collaborative neural repair at NASA's Jet Propulsion Laboratory (JPL), Pasadena, CA. "This system can do the work of four therapists and help monitor a patient's progress in a controlled manner.'

The device, still in the development phase, will look like a treadmill with robotic arms, and will be fitted with a harness to support the patient's weight. The arms resemble knee braces that attach to the patient's leg, guiding the legs properly on the moving

The robotic stepper device is one of several projects in the Neural Repair Program at the UCLA Brain Research Institute and JPL. UCLA neurologists now believe that by using the robotic stepper device in rehabilitation, some patients functionally confined to wheelchairs may be able to learn to walk again, and those with limited movement could improve their level of walking.

NASA and UCLA researchers emphasize the robotic stepper is still in development and is not yet ready for use in rehabilitation. However, the device could be part of clinical trials at UCLA in about three years.

"We see tremendous potential for rehabilitation that uses this form of therapy," said Dr. Reggie Edgerton, professor in the departments of physiological science and neurobiology at UCLA.

"Some rehabilitation centers around the world are starting programs that will allow therapists to train individuals affected with spinal injuries, stroke and perhaps other neuromotor disorders to improve their mobility and stepping capacity," Edgerton said. "This robotic device could help therapists in those rehabilitation efforts."

Current rehabilitation therapies are laborintensive, and require up to four therapists. Unlike therapists, who only sense and observe a patient's progress, the robotic device takes precise measurements of the person's force, speed, acceleration, and resistance, counting each step the patient takes. These precise measurements help therapists monitor the day-to-day progress of their patients and provide valuable information on the effectiveness of the therapy. These measurements will be used by a control system that can assist the robotic stepper device as needed

JPL robotic engineers have worked alongside therapists to develop the device, which has highly sensitive sensors that collect up to 24 different data readings of the patient's activity. The device, connected to a computer, displays the information on the screen for the therapist

According to Weiss, the same device could help them walk safely after prolonged periods in space, such as extended missions on the International Space

JPL and UCLA are actively pursuing efforts to commercialize the robotic system. JPL technically supported UCLA in filing a patent application in August.

"Many technologies developed at NASA for space exploration have tremendous medical applications. We can provide practical solutions based on our engineering experience," said Dr. Antal Bejczy, senior research scientist and lead engineer on the robotic stepper device

SPACE CENTER Roundup

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Assistant EditorNicole Cloutiernicole.cloutier1@jsc.nasa.gov

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